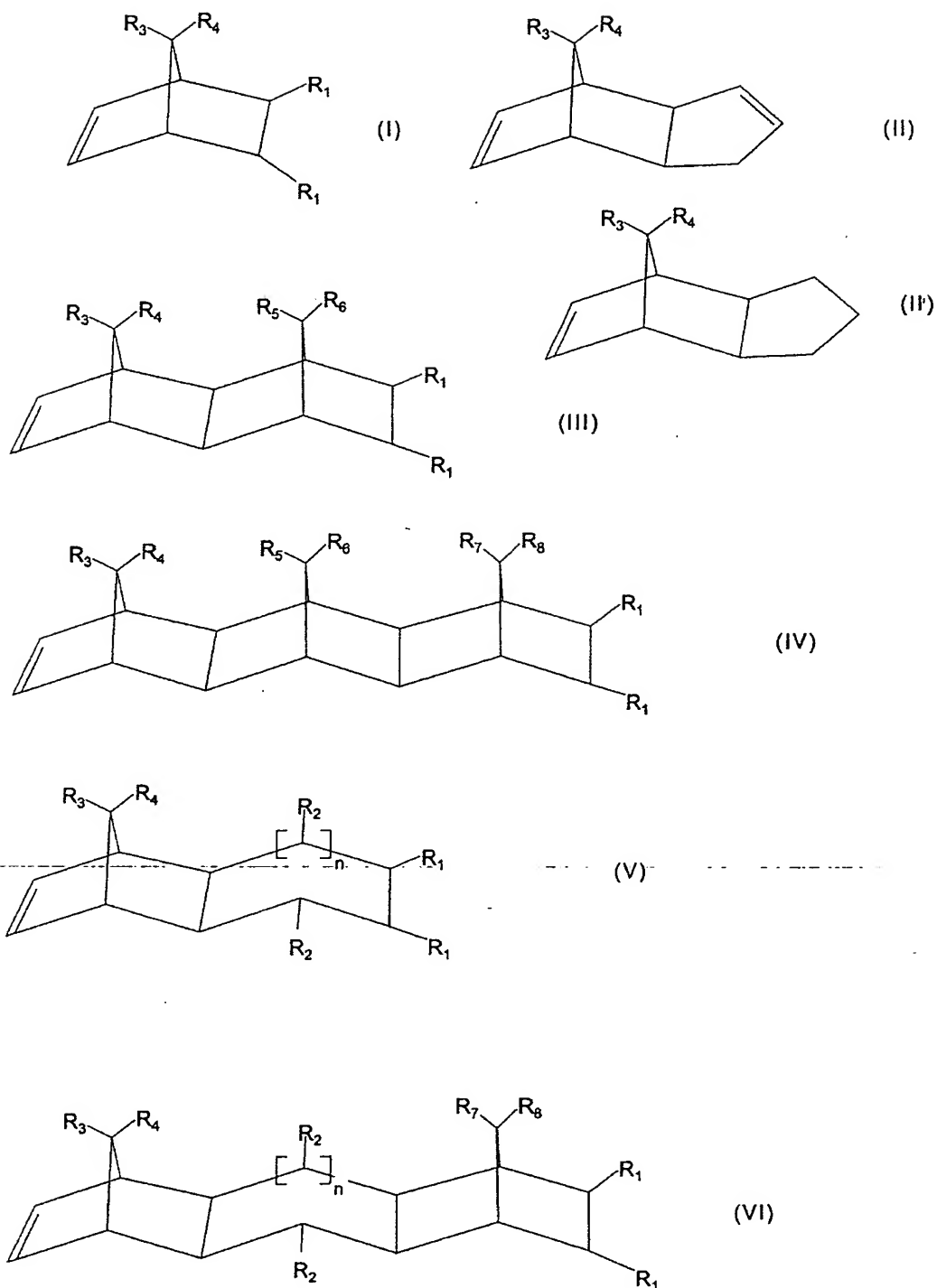


Patent claims

1. A process for producing a packaging composed of a thermoformable film composed of thermoplastic polyolefins, via thermoforming, where, after thermoforming, the film has an improved heat distortion temperature and a high water-vapor barrier, which comprises using, in the thermoformable film, an amount in the range from 5 to 100% by weight, based on the total weight of polyolefins, of COC with a glass transition temperature T_g in the range from 65 to 200°C, measured to DIN EN ISO 11357-1 with the aid of a DSC at a heating rate of 10 K/min, and which comprises producing therefrom, via thermoforming at a temperature in the range from 70 to 170°C, preferably from 80 to 160°C, a packaging whose heat distortion temperature is in the range from 60 to 200°C, preferably from 80 to 200°C, particularly preferably from 110 to 180°C.
2. The process as claimed in claim 1, wherein the COC has an average molar mass, expressed as M_w , in the range from 500 to 2 000 000 g/mol, preferably from 1000 to 1 000 000 g/mol, in particular from 3000 to 500 000 g/mol.
3. The process as claimed in claim 1 or 2, wherein the COC has a viscosity number to DIN 53 728 in the range from 5 to 5000 ml/g, preferably from 5 to 2000 ml/g, and in particular from 5 to 1000 ml/g.
4. The process as claimed in one or more of claims 1 to 3, wherein the thermoformable film is a monofilm or a multilayer film and has a total thickness in the range from 5 to 2000 μm , preferably from 50 to 500 μm , particularly preferably from 200 to 400 μm .
5. The process as claimed in one or more of claims 1 to 4, wherein the COC contains, based on the total weight of the COC, from 0.1 to 100.0% by weight, preferably from 0.1 to 99.9%, of polymerized units which derive from at least one polycyclic olefin of the formulae I, II, II', III, IV, V or VI

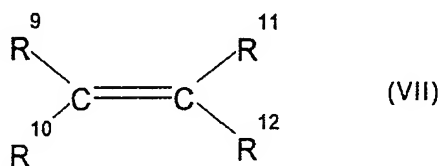


where R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , R^7 , and R^8 are identical or different and are a hydrogen atom or a C₁-C₂₀-hydrocarbon radical, such as a linear or branched C₁-C₈-alkyl radical, C₆-C₁₈-aryl radical, C₇-C₂₀-alkylenearyl radical, or a cyclic or acyclic C₂-C₂₀-alkenyl

radical, or form a saturated, unsaturated or aromatic ring, where identical radicals R^1 to R^8 in the various formulae I to VI have a different meaning, and where n indicates values from 0 to 5,

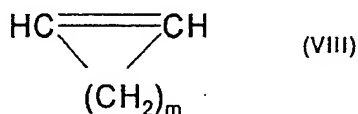
5 and

contains, based on the total weight of the cycloolefin copolymer, from 0 to 99.9% by weight, preferably from 0.1 to 99.9% by weight, of polymerized units which derive from one or more acyclic olefins of the formula VII



15 where R^9 , R^{10} , R^{11} and R^{12} are identical or different and are a hydrogen atom, a linear, branched, saturated or unsaturated C_1 - C_{20} -hydrocarbon radical, such as a C_1 - C_8 -alkyl radical or a C_6 - C_{18} -aryl radical.

20 6. The process as claimed in claim 5, wherein the COC contains, based on its total weight, an amount of from 0 to 45% by weight of polymerized units which derive from one or more monoolefinic olefins of the formula VIII



25 where m is a number from 2 to 10.

30 7. The process as claimed in any of claims 1 to 6, wherein the COC has a glass transition temperature T_g in the range from 85 to 200°C, preferably from 120 to 190°C, and wherein the process comprises, where appropriate, a mixture of COCs with different T_g .

8. The process as claimed in any of claims 1 to 7, wherein the

thermoformable film comprises, as other polyolefins, high- or low-density polyethylenes (HDPE, LDPE, LLDPE), ethylene-vinyl acetate copolymer, ionomer, polypropylene, olefin copolymers, plastomers, or a mixture of these.

5

9. The process as claimed in any of claims 1 to 8, wherein the thermoformable film comprises up to 40% by weight of cut film arising during the production process in the form of regrind.

10 10. A packaging, produced by a process as claimed in one or more of claims 1 to 9, which, after thermoforming of the thermoformable film, has a heat distortion temperature in the range from 60 to 200°C, preferably from 80 to 200°C, particularly preferably from 110 to 180°C.

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11. The packaging as claimed in claim 10, which is a blister pack.